

The Comparative Financial Performance of Bilibili, iQIYI and Mango Excellent Media during Pandemic Situation

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Abstract

All the sectors of the physical market have been affected by the financial crisis during the epidemic, whereas the media and entertainment industry has been able to maintain stable revenues with certain growth, which is why we are interested in this area. This essay analyzes the revenues and losses of three Chinese media companies, namely Bilibili, IQIYI and Mango Excellent Media, in order to deduce the trends of the video media industry in the post-epidemic economic recovery by comparing their financial revenues, expenses, and cash flows in the main video direction over three years from 2019 to 2021 (before and after the epidemic). It uses quantitative analysis to collate the data from the websites and comparative analysis of the same categories so that readers can easily understand the strengths and weaknesses of the three companies. Besides chart analysis, the essay also uses graphical analysis to compare their three-year turnover and membership sales which answers the question of which financial losses are more influenced by, operational management or the epidemic, and recommends targeted solutions for improvement.

Keyword: Bilibili, iQIYI, Mango Excellent Media, Financial Performance, Quantitative Analysis, Chart Analysis, Graphical Analysis, Profit Revenue and Losses.

1. Introduction

Compared with other countries, China's companies suffered the most since China adopted the longest, strictest pandemic prevention and control policy. Furthermore, all the sectors of the physical market have been affected by the financial crisis during the epidemic, whereas the media and entertainment industry has been able to maintain stable revenues with certain growth, which is why we are interested in this area in China. The essay chooses Bilibili, iQIYI, and Mango Excellent Media in China as research subjects due to their similarities of content originality, content variety, a large number of users in comparison with YouKu, WeTV and etc.

The main goal of this essay is to explore the financial impact of the Covid-19 on the three major video giant companies: Bilibili, iQIYI, and Mango Excellent Media in China. First, it will conclude and present new ideas with similar thesis confirmation. Secondly, it will use quantitative analysis to research the financial reports of the three major companies and present statistical data, mainly from the annual financial reports of these companies in recent years, user usage, and other sources. Finally, it will summarize to argue whether the hypothetical propositions are valid. For example, whether the epidemic did have an energetic or passive influence on the finances of the three major companies, or whether the positive impact was due to the fact that populations were stuck at home during the epidemic, so figures such as the number of web series broadcast and platform revenues skyrocketed, while the negative impact was the economic crisis caused by the production lag caused by the epidemic, etc.

The research questions are as follows:

- 1) What impact did the covid-19 have had on Bilibili, iQIYI, and Mango Excellent Media on financial performance?
- 2) Who had given more benefits to audiences to attract more followers?

With these questions, the objective of the essay is to compare the financial performance of three biggest entertaining companies in China, namely Bilibili, iQIYI, and Mango Excellent Media, during the pandemic of COVID-19. The essay is then illustrated by providing some history of these three companies and their performances during the pandemic. Financial data of these three companies are collected and a comparative study was conducted, which was explained in the following parts. Later, a discussion and conclusion were made to answer the research questions.

2. Background of the Companies and Covid-19 Pandemic Challenges

2.1 Background of the Companies

Bilibili, Inc.

It, also known as B-site, was created on 26 June 2009 which is a cultural community and video website for the young generation in China. It was launched on the NASDAQ in the US on 28 March 2018, followed by an official secondary listing in Hong Kong on 29 March 2021, formerly known as a platform for video production and shared content on animated, manga and online games. After years of development, continuous changes in terms of customer base, video creators and diversified content have helped it develop into a new video media market. With the high frequency of producing high-quality videos as well as TV series, it has developed a single video platform into a diverse cultural exchange platform. Apart from such components as Lifestyle, amusement, game-playing, anime and technological sections, it also runs live streaming, game hubs, peripherals, and other businesses. There are various types of memberships to watch videos on its website: visitor, registered, full, and premium member, among which full members are the core group of the community, while “premium Members” represent its paid product, whose numbers have increased by 129% to 6.1 million by the end of September 2019 (Jiang, 2019). Compared to other video platforms, Bilibili has its own bloggers and video rights, which makes its video content more original and richer. According to its investment trend over the past few years, the main segmenting of the company is to consolidate its core users and fans of different elements of culture through a diverse range of video content.

iQIYI, Inc.

It, founded on April 22, 2010, is the second largest OTT in China. As a Baidu investment set up OTT company, it early received a lot of financial support from Baidu, and was set up in line with Baidu “Middle page” strategy. Because of Baidu’s investment, it launched web-based and Mobile client in 2010 that supports iPhone/iPad. In February 2011, it announced that it had 148 million monthly users after it has been online for just 10 months, having already covered more than 50% of China's online video users. In 2014, it took the lead in establishing the first AI in the world to understand user behavior based on search and video data - iQIYI Brain, which uses big data and AI to help in production, operation and consumption. And through the strong cloud computing capacity, as well as the leading industry’s bandwidth reserves, and the world’s largest video distribution network, it provided better video services to users. In 2015, iQIYI created a video business ecosystem that includes e-commerce, games, movie



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tickets and other services, connecting users and services, helping the diversification of the business model of video websites. On March 29, 2018, it was finally successfully listed on NASDAQ in the United States.

MANGO EXCELLENT MEDIA CO., Ltd

It was launched in April 2014 as a new media audio-visual integrated communication service platform based on the interaction of TV and video, integrating the characteristics of the Internet and television, and also the unique e-video platform of Hunan TV. In 2017, MANGO Excellent Media reversed its deficit to generate revenue of RMB 489 million, the first in the Chinese video industry. In July 2018, it was officially renamed "Mango Excellent Media" and ranked among the top 500 media companies in the world in the past four years. It started early as an independent platform created by Hunan TV, who relied on their experience in TV media to build an internet platform driven by traditional media self-produced copyright content. Each stage of Mango's media integration development has been an interactive development of old and new media breaking through each other's limitations, building a new media integration model in a step-by-step exploration. It mainly provides HD video-on-demand service for all the television programs of Hunan TV and broadcasts popular dramas, movies, variety shows, and music video content timely, as well as simultaneous live streaming of part of the TV network (Zhang, 2020). Mango is more scripted, and their strong teamwork makes for consistently innovative video content. It can continue to innovate and launch its web series while maintaining its originality, hence attracting consumers and keeping a steady stream of potential subscribers.

2.2 Covid-19 Pandemic Challenges

Bilibili Inc.

We can see a significant increase in the size and engagement of the active user base during the first quarter of 2020 partly due to the China policy restrictions in response to the COVID-19 pandemic. Although Bilibili has been able to maintain the power of user growth and engagement since then as China gradually relaxed its Covid-19 restrictions, it may not be able to maintain the growth of the active user base in the long term (Creemers, 2021). Since the epidemic, the state started to cooperate with companies to ensure that the platform could deliver positive energy to viewers during special periods, as the response the government's policy of supporting and ensuring the operation of video broadcasting platforms.

iQIYI, Inc.

The spread of the disease and the adoption of preventive measures have a strong inhibitory effect on content production and headline publishing throughout the online entertainment industry which caused an undersupply of content, especially cinema movies, throughout 2020 and 2021, which is likely to continue in the future.

Since 2020, the covid-19 pandemic has severely affected the distribution of its future films, resulting in a reduction in the amount of content it offers. In turn, this has a negative impact on its ability to retain existing subscribers and attract new ones. Its subscriber base has fluctuated: in the first half of 2020, the number of subscribers increased due to increased demand for entertainment resulting from temporary office closures, isolation and social distance measures, and at the end of 2020, the number of subscribers was down compared with 2019, due to a weaker supply of content, particularly films. In 2021, its subscriber base continued to fluctuate (Baidu, 2020). In terms of video viewership as well as membership sign-ups and purchase figures for iQIYI 2020, which grew by 26% year-on-year and reached 1189 billion subscribers, it was less affected by the pandemic.

MANGO EXCELLENT MEDIA CO., Ltd.

Mango TV has overcome the adverse impact of repeated interruptions of Covid-19 on offline member operations and production of major programs and content, attracting 50.4 million active members by the end of 2021, 39.5% more than in 2020. The member business income totaled 3.688 billion yuan, an increase of 13.3% year on year (Cai, 2019) to reduce losses from potential risks such as epidemics, Mango TV has expanded its documentary filming project in addition to producing dramas and a variety of entertainment shows. Not only does this reduce the impact of the epidemic, but it also reflects the company's social values. Thus, during the epidemic, it was able to obtain commercial value and social value praised by the government.

The cultural media industry has a strong correlation with the macro-economy. The media industry, as a consumer sector, is influenced by many factors, such as consumers' actual disposable income level, consumer income structure, consumer confidence index, consumption tendency and so on. The 2019-2021 period under the influence of China-US trade war and the COVID-19 pandemic, and the complex and volatile macroeconomic situation, may bring uncertainty to the medium-and long-term development of those companies. The company will adhere to the main business, continue to do fine and strong, the implementation of sound development of the business strategy. From the information above regarding these three companies in the entertainment industry, there is important to understand and see the changes in the financial performance of the companies. Therefore, the objectives of this study are to investigate the impact of Covid-19 on Bilibili, iQIYI, and Mango on financial performance. These three companies are taken as case studies.

3. Methodology

Currently, Bilibili, IQIYI, and Mango Excellent Media, are the three best companies in the Chinese media industry, with a large number of loyal users and peripheral products. This is why we have chosen them for our main research. After all, it is necessary to rely on data analysis before we can conclude, and they have the most comprehensive financial information for us to concentrate on.

Since this essay focuses on their financial data descriptive analysis is employed. The research methodology is mainly based on quantitative analysis of the data, with the main sources of the financial reports of the three companies over the past three years and information gathered from their websites.

The study highlights their consolidated balance sheet, revenues, liquidity, and other aspects to explain whether the company's profitability is more affected by the epidemic or operational management. Furthermore, it will help us to deduce how the media industry will develop in the following years and what regulatory measures need to be implemented against unknown risks.

In this study, we employed the fundamental statistical analysis from the data retrieved from the company annual reports and cash flow data to analyze trends in the finances of these three companies before and after the pandemic. At the same time, our first glance also revealed that Bilibili was good at using its two-dimensional advantage to attract and develop customers, therefore it should expand investment while maintaining its strengths to extend its development model to increase profitability (Ansoff, 1965). Some researchers believe that assets and capabilities can complement each other, so they argue that MANGO should make mergers and acquisitions to create synergistic value.

In the following sections, there are several findings that are concluded from Tables. The explanation about the financial statements analyses comparatively the three companies from 2019 to 2021 are presented.

4. Findings

The first analysis is to conduct the common size of the balance sheet, income statement and statement of cash flows of the three companies.

Table 1 below presents the comparative common-sized balance sheet from 2019 to 2021.

Table 1 Common Size of Consolidated Balance Sheet for Bilibili Inc., iQIYI, Inc. and MANGO EXCELLENT MEDIA CO., Ltd.

Common Size	Bilibili Inc			iQIYI, Inc.			MANGO EXCELLENT MEDIA CO., Ltd.		
	2021	2020	2019	2021	2020	2019	2021	2020	2019
total current assets	70.02	65.95	66.54	27.13	46.26	45.26	72.39	80.75	68.67
total non-current assets	29.98	34.05	33.46	72.87	53.74	54.74	27.61	39.61	31.33
total assets	100.00	100.00	100.00	100.00	100.00	100.00	100.00	120.36	100.00
total current liabilities	23.19	30.97	27.54	52.92	51.58	45.04	34.03	53.65	46.47
total non-current liabilities	35.09	36.42	23.25	33.72	28.82	33.27	0.88	0.36	1.89
total liabilities	58.28	67.39	50.79	86.64	80.40	78.31	34.90	54.01	48.36
Shareholders' equity	41.72	32.61	49.21	12.42	19.37	21.46	65.10	66.35	51.64
total liabilities and shareholders' equity	100.00	100.00	100.00	100.00	100.00	100.00	100.00	120.36	100.00

The market is competitive so iQIYI needs to use a lot of videos to attract its users to continue using it. It spent a huge amount of money on copyright. In many cases, competition is the primary external element that prompts business owners to implement tactics to raise the caliber of their offerings in order to keep a consistent stream of clients. This is the case with the IQIYI platform, which is under pressure from outside sources due to competition from other service providers in China that are experts in the same field of services (Wu, 2022). But MANGO's main market is variety shows, so the cost of copyright is less than it, so its cost of copyright is only half of what it funds.

Bilibili users only care about animation copyright and do not have to use a huge amount of money to buy the rights to the TV copyright. By utilizing the product strategies of community mode operation, low and simple price strategy, and vertical marketing channel strategy, it has a competitive edge in the Chinese market for the youthful generation of consumers (Tian, 2021).

iQIYI's reputation also drives up the value of its non-current assets. MANGO is a subsidiary, so it cannot calculate goodwill directly. Because of company investment in video and TV series, production costs and equipment are also relatively high, while long-term assets and investments also maintain a high standard because of company investment in TV series. The short-term investment is less than the long-term investment, which also affects the ratio of current assets to non-current assets. According to study, between 2017 and 2021, its overall revenue climbed from 17.4 billion yuan to 30.6 billion yuan, with membership revenue increasing from 37.6% to 54.6% while advertising revenue declined from 47% to 23.2%.

IQIYI's high current liabilities are caused by high accounts payable and short-term loans. It has tens of billions in accounts payable on its books, which are mainly due to third-party content purchases and bandwidth charges. The high level of payable indicates that company has strong bargaining power in the upstream market and can occupy the supplier's funds for free. On the other hand, it does have a gap of tens of billions.

MANGO's total non-current liabilities are low because its long-term corporate and other long-term liabilities are extremely low, possibly because it is a subsidiary of Hunan TV. It has made the combination of new and old media for cultural media firms a reality. Mango Super Media has strong investment value since the purchase is being considered from both the standpoint of the relative valuation technique and the EVA DuPont analysis method (Wang, Mei, Lu, Cai, & Yu, 2022).

The reason why iQIYI's shareholder's equity accounts for a low proportion of total liabilities and shareholder's equity is that the total liability is too large, resulting in a low proportion of shareholder's equity when it is equal to the total of the other two parties.

Table 2 below demonstrates the comparative common-sized income statements of the three companies from 2019 to 2021.

Table 2 Common Size of Consolidated Income Statement for Bilibili Inc., iQIYI, Inc. and MANGO EXCELLENT MEDIA CO., Ltd.

Common Size (%)	Bilibili Inc			iQIYI, Inc.			MANGO EXCELLENT MEDIA CO., Ltd.		
	2021	2020	2019	2021	2020	2019	2021	2020	2019
Net revenues	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Cost of revenues	79.14	76.33	82.44	114.66	120.33	104.67	86.41	86.71	90.67
Gross profit/ Operating Loss	20.86	23.67	17.56	-14.66	-20.33	-4.67	13.59	13.29	9.33
Operating expenses									
Sales and marketing expenses	29.90	29.10	17.68	90.05	93.86	104.67	16.08	15.45	17.12
General and administrative expenses	9.48	8.13	8.74	15.46	17.46	18.06	4.53	4.49	4.88
Research and development expenses	14.65	12.61	13.20	9.15	9.01	9.20	1.77	1.32	1.91
Total operating expenses	54.03	49.85	39.62	114.66	120.33	131.93	22.38	21.26	23.92
Loss from operations	-33.17	-26.18	-22.06	-129.32	-140.67	-136.60	-8.79	-7.97	-14.59
Total other income/(expense), net	-1.47	1.17	3.36	-5.02	-3.18	-3.34	3.76	4.04	1.18
Loss before tax	-31.70	-27.35	-25.42	-124.30	-137.49	-133.27	-12.55	-12.01	-15.77
Income tax	0.49	0.44	0.53	0.32	0.08	0.18	0.18	0.16	0.77
Net loss	-32.19	-27.79	-25.94	-124.62	-137.57	-133.45	-12.72	-12.17	-16.54

In China, with the continuous expansion of short-form video platforms, companies such as Mango Video, Bilibili, and iQIYI have been stuck in content innovation and development. Moreover, as the outbreak of the epidemic unexpectedly hit, these companies are facing an unprecedented crisis in the financial aspect, and the competition among these long-form video platforms has already entered the next stage. In terms of figures, although they were profitable when looking at the data in detail, it was not so idealistic (Su, 2022).

The common size data derived from the analysis of the Consolidated Income Statement of these three companies shows that compared to the other two, Bilibili's data does not differ significantly between the three years 2019-2021, which means that its market development is quite stable (Zhao & Wang, 2022). Since 2018, the fall in online advertising, lengthy videos, and other revenue owing to general market swings has been attributed to the macroeconomic environment's instability and the modification of national regulations. Yet, starting from 2019, there was a steady decrease in market volatility and a gradual rise in revenue costs. In terms of sales and marketing expenses, it had the highest share in 2019, with membership services and content distribution revenues contributing to the main volume increase. Consistent growth in subscription memberships drove the sales growth.

Similarly, the highest total operating expenses in 2019 for iQIYI were selling and administrative expenses, respectively, mainly due to marketing expenses for some applications and an increase in sales and marketing game business expenses. Technology research and development expenses, and the salary of employees also rose. The reason for the company gradually reducing its operating losses is the strategy of "cost reduction" (Chen, 2020). This policy has been implemented since 2020 with a remarkable turnover increase. However, it is important to note that cost reduction has also had an impact on content supply. Since the fourth quarter of 2019, the firm has had negative cash flow from operating activities. Their tax before loss had narrowed due to the home defense policy in the first half of 2020 till 2021.

MANGO has minimal research and development expenses in 2020. As a content-driven growth video platform, its self-produced content eco-system and content product matrix cannot thrive without continued investment in the innovation sector.

Table 3 presents the comparative common-sized operating cash flows of the three companies from 2019 to 2021.

Table 3 Common Size of Consolidated Liquidity Ratio Analysis for Bilibili Inc., iQIYI, Inc. and MANGO EXCELLENT MEDIA CO., Ltd.

Common Size (%)	Bilibili Inc			iQIYI, Inc.			MANGO EXCELLENT MEDIA CO., Ltd.		
	2021	2020	2019	2021	2020	2019	2021	2020	2019
Net cash provided by/ (used in) operating activities	-83.66	414.47	14.79	77.81	-131.27	10570.72	35.19	212.68	11.59
Net cash used in investing activities	-776.80	-4901.89	-300.98	-16.50	3.86	-31795.78	-199.99	71.03	4.33
Net cash provided by financing activities	960.46	4587.42	386.19	38.69	227.40	21325.06	264.80	-183.71	84.08
Cash flows from operating activities	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Effect of exchange rate changes on cash and cash equivalents held in foreign currencies	-10.08	-256.60	8.17	2.83	-2.21	303.82	0.04	0.08	-0.02
Cash and cash equivalents at beginning of the year	147.85	2731.21	269.18	-143.03	167.62	18294.59	332.92	1845.44	99.51
Cash and cash equivalents at end of the year	237.77	2574.61	377.35	-40.20	265.41	18698.42	432.96	1945.52	199.50

About the common size of cash flows from operation actives for the past three years, we can see that the differences came very substantially to the operating activities of iQIYI in 2019. Long video

platform was a highly-expected business by market for quite years. And according to the features of their products, just the film and television contents may be rewarded hundreds of times. Compared with the two competitors Bilibili and Mango Excellent Media, it attracted a lot of investments and entered various realms from film and television production to manufacture internet celebrities and “traffic stars”, also the derivative industries like to maintain the leaders of fans.

“Traffic stars” is a new word from China’s social media, which is used to describe those internet celebrities with a large fans base. And these internet celebrities were made by their companies according to the personas from the big data. Also, the huge number of fans were not so truthful—the leaders of fans were trained how to inspire and unite the star chasers, use them to enhance the popularity of number or data, because the temporary great development of video platform and internet celebrity economy had made too many investors crazy about the unreliable growing number of big data.

And such a crazy investment also pushed other capital parties of investment, and we can see the changes of the other two companies in 2020. But the sustainability of internet celebrity economy is not so good. The fans’ leaders were trained and paid, but those star chasers were usually students from schools, which had less consumption capabilities. Thus, the big data caused misleading and a huge bubble of fans economy. That will take more time for iQIYI to maintain and develop these young followers, till they have more capabilities and will pay. Finally, it will balance the cost of building future market and the sell short of hedging capital.

Then, a similar situation came to Bilibili in 2020. As an internet platform, it also tries to make up its own celebrities as a brand. And its focused realms are mainly about animations, movies, games and other online businesses. The pandemic situation had significantly benefited its relevant online businesses. And the physical by products were also benefited by strong logistics during the time that logistics had not been heavily affected yet.

As to Mango, we see its change ratios were not so big in increase or decrease like the others. On the one hand, it as state owned background company, whose scale is quite bigger than the others; on the other hand, its brand was the top entertainments brand within domestic for many years, having taken too many of the market shares and loyal users which will ensure that the ratio does not change too high.

Another extreme data is the effect of exchange rate on Bilibili and iQIYI, but one decreased and the other one increased. The exchange rate was very different after the change of one year, and the companies faced different situations when they got huge investments.

From the comparative analyses of balance sheet, income statement and statement of cash flows can be used to determine the financial ratios of the three companies as presented in Table 4 next.

Table 4 Financial ratio of Liquidity Ratio Analysis for Bilibili Inc., iQIYI, Inc. and MANGO EXCELLENT MEDIA CO., Ltd.

	Bilibili Inc			iQIYI, Inc.			MANGO EXCELLENT MEDIA CO., Ltd.		
	2021	2020	2019	2021	2020	2019	2021	2020	2019
ROA	37.24	50.28	43.68	71.94	61.65	64.73	58.81	72.70	73.20
Current Ratio	301.94	212.94	241.63	51.27	89.68	100.49	212.74	150.51	147.79
Acid Test Ratio/ Quick Ratio	239.61	149.65	125.48	37.94	45.77	71.08	134.24	88.37	83.97
Absolute Liquidity Ratio	301.94	212.94	241.63	51.27	89.68	100.49	212.74	150.51	147.79
Cash Ratio	125.55	127.15	159.32	13.68	44.02	34.25	116.88	62.14	63.82

iQIYI's high current liabilities are an important reason for the company's low current ratio. The reason for the abnormal Quick Ratio has a lot to do with the company's high total debt. The ratio of

Absolute Liquidity Ratio is low because current liabilities are high, but current assets are few. Despite the overall improvement over the previous two years, the company current ratio (defined as Current Assets/ Current Liabilities) was the only one that was under one which means that because of its significant reliance on intangible assets, fixed assets, and inventory, it is a fragile corporation when it comes to paying financial obligations (the hardest assets to liquidate in the need of debt repayments) (Marques, 2020).

Table 5 Financial ratio of Turnover Ratio Analysis for Bilibili Inc., iQIYI, Inc. and MANGO EXCELLENT MEDIA CO., Ltd.

	Bilibili Inc			iQIYI, Inc.			MANGO EXCELLENT MEDIA CO., Ltd.		
	2021	2020	2019	2021	2020	2019	2021	2020	2019
Inventory Turnover Ratio	77.03	74.65	24.15	917.97	255.46	511.37	35.41	40.56	42.27
Debtors or Receivable Turnover Ratio	67.72	639.62	381.40	1766.94	3479.68	1711.25	462.16	0.00	3139.67
Capital Turnover Ratio	14.49	21.20	10.66	137.60	119.52	123.27	14.33	20.27	23.41
Asset Turnover Ratio	37.24	50.28	43.68	71.94	61.65	64.73	58.81	72.70	73.20
Net Working Capital Turnover Ratio	-218.92	463.69	616.03	-462.27	-515.32	776.92	439.54	372.55	730.94
Cash Conversion Cycle	34.83	22.37	49.62	3.21	4.52	3.83	36.06	0.00	24.01

The high Inventory Turnover Ratio of iQIYI is related to its business model, because the firm has far more accounts receivable than Bilibili and Mango. Its Debtors or Receivable Turnover Ratio value is high because one of Accounts receivable and Receivables due from related parties must be better than the other two companies. The abnormal Capital Turnover Ratio is because company total assets are similar to those of the other two companies, but their total current liabilities are much higher than those of Bilibili and Mango TV. The very low Net Working Capital Turnover Ratio is also related to its surge in debt over the past few years. Cash Conversion Cycle is low because its short-term investment amount is very small. From the analysis of the two indicators of the inventory turnover rate and accounts receivable turnover rate of Mango Supermedia's merger, the inventory turnover rate and accounts receivable turnover rate after the merger of Mango Supermedia have decreased, which makes the company's capital utilization efficiency suffer impact, but the overall operational capacity is still relatively stable (Wang et al., 2022). The sales performance of the Bilibili company's financial report performance in the previous accounting periods 2019 and 2020 was really subpar. The degree of conversion of input and output is less than anticipated by the business strategy from the standpoint of the primary business income. Furthermore, primarily reflected in the income from fixed assets or special items of continuing operations is a significant amount of investment in non-revenue costs. The running costs' cash outlays are comparatively substantial.

The profit loss of the interest cost and financial cost indicates that there may be some unsuitable leverage in the company's capital structure. At the same time, the overall investment conversion rate of the company is relatively low while the financing position is pretty strong, displaying current assets One-way inflow.

Table 6 Financial ratio of Operating Profitability Ratio Analysis for Bilibili Inc., iQIYI, Inc. and MANGO EXCELLENT MEDIA CO., Ltd.

	Bilibili Inc			iQIYI, Inc.			MANGO EXCELLENT MEDIA CO., Ltd.		
	2021	2020	2019	2021	2020	2019	2021	2020	2019
Earning Margin	20.86	23.67	17.56	-14.66	-20.33	-4.67	13.59	13.29	9.33
Return On the Investment	-8.02	-9.80	0.00	-199.50	-155.22	0.00	-9.54	-17.30	0.00
Return On Equity (ROE)	-28.73	-42.85	-23.03	-721.73	-437.76	-402.47	-11.49	-16.04	-23.44
Earnings Per Share	9.90	6.85	4.00	1.67	1.58	1.45	0.00	0.00	0.00

Earning Margin is negative because iQIYI has been operating at a loss for three years. Its Return on Equity the Investment is low because the pre-tax loss is close to 20 times the pre-tax loss of Bilibili and Mango TV. The abnormal ROE of it is because the EAIT is close to 20 times the EAIT of Bilibili and Mango TV. The Earnings Per Share of firm is lower than that of Bilibili mainly because the number of iQIYI Ordinary Shares exceeds that of Bilibili, but the gap in Net revenues is not large. From the perspective of shareholders, the data show that the return on equity of Bilibili over the past 36 months is -23.03, -42.85, and -28.73. The biggest problem of Bilibili at this stage is the serious net loss, which is like a "bottomless hole", and it is impossible to make a stable dividend plan. At the same time, due to the lack of profit points, its profitability is also worrying. Although it is a promising new video site with investments from Tencent, Alibaba, and Sony, it still needs to strengthen its performance in meeting shareholder responsibilities (Zhao, 2020).

Table 7 Financial ratio of Business Risk Ratios for Bilibili Inc., iQIYI, Inc. and MANGO EXCELLENT MEDIA CO., Ltd.

	Bilibili Inc			iQIYI, Inc.			MANGO EXCELLENT MEDIA CO., Ltd.		
	2021	2020	2019	2021	2020	2019	2021	2020	2019
Operating Leverage	156.74	58.87	0.00	-309.25	-638.79	0.00	141.70	-440.77	0.00
Financial Leverage	59.69	71.60	0.00	-166.82	74.13	0.00	51.46	-56.28	0.00
total Leverage	93.56	42.15	0.00	515.88	-473.55	0.00	72.93	248.04	0.00

Because EBIT and Sales and marketing expenses are negative ten times, Operating Leverage is much lower than the other two companies. iQIYI's Financial Leverage problem is related to too high Net revenues and too low Loss for EBIT. Its total Leverage has changed a lot and is related to the changes in Net Profit and Sales. Bilibili is growing at a rapid pace. Despite the fact that its various data are not visually appealing, the company has a large number of loyal users and continues to expand (Hou, 2022).

Table 8 Financial ratio of Financial Risk Ratios for Bilibili Inc., iQIYI, Inc. and MANGO EXCELLENT MEDIA CO., Ltd.

	Bilibili Inc			iQIYI, Inc.			MANGO EXCELLENT MEDIA CO., Ltd.		
	2021	2020	2019	2021	2020	2019	2021	2020	2019
Debt Equity Ratio	0.82	1.07	0.45	0.00	0.00	0.09	0.02	0.00	0.00
Interest Coverage Ratio		-27.64	-27.24	-4.45	-6.94	-2.54	0.00	0.00	0.00
Debt Service Coverage Ratio	-8.73	4.68	2.47	-16.17	-13.97	11.14	6.16	6.72	3.55

The abnormal Interest Coverage Ratio is because Bilibili's Loss for EBITDA will grow too fast in 2021, and the Interest Expense will rise steadily every year. IQIYI's Debt Service Coverage Ratio is too low and its total Loss for EBITDA is too large.

Table 9 Financial ratio of Stability Ratios for Bilibili Inc., iQIYI, Inc. and MANGO EXCELLENT MEDIA CO., Ltd.

	Bilibili Inc			iQIYI, Inc.			MANGO EXCELLENT MEDIA CO., Ltd.		
	2021	2020	2019	2021	2020	2019	2021	2020	2019
Fixed Asset Ratio	0.00	0.00	0.00	0.07	0.06	0.07	0.01	0.02	0.02
Ratio to current Assets to Fixed Assets	0.00	0.00	0.00	8.57	16.00	11.56	102.47	69.15	64.94
Proprietary Ratio	20.04	11.65	17.22	6.25	9.43	13.44	49.07	45.27	88.21

Mango's current assets are only one-tenth of iQIYI's, while its fixed assets are the same as iQIYI's, resulting in Mango's Ratio to current Assets to Fixed Assets being 10 times that of iQIYI. The proprietary ratio of Mango is high because its Shareholder Fund is the same, the total Tangible Assets is only 1/3 of that of the company. Original online video serves as its primary resource, and also as the foundation for an IP linkage industry chain. From top to bottom, it covers professionally made dramas, films, variety shows, etc. as well as original videos posted by regular people, satisfying a variety of user needs. The shows created by professional producers also draw from a variety of sources. One is the external acquisition of acclaimed, well-liked shows. To change the situation, more self-made originals must be produced because iQIYI's net profit in recent years has been negative (Chen, 2020).

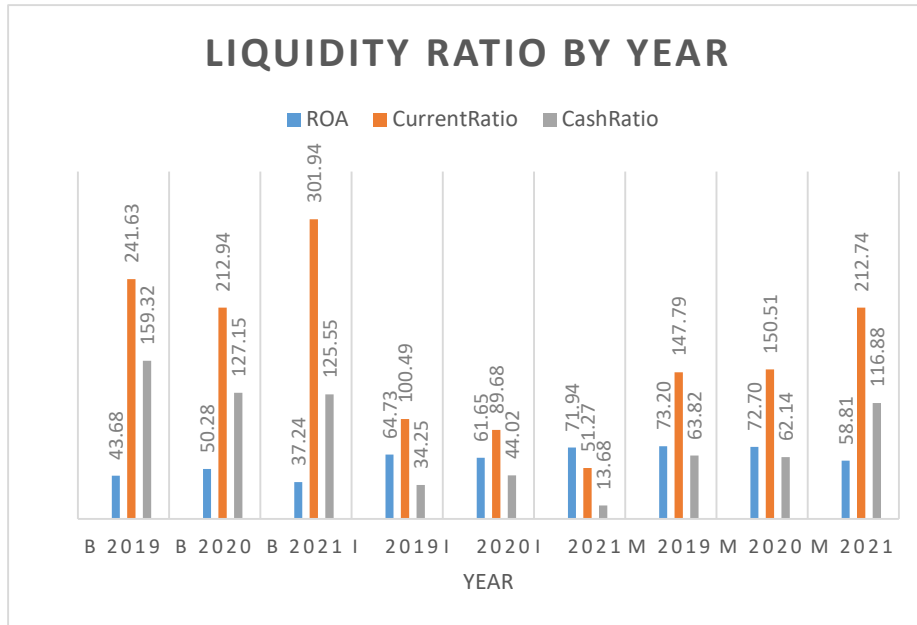


Figure 1 Financial ratio of Liquidity Ratios by year for Bilibili Inc., iQIYI, Inc. and MANGO EXCELLENT MEDIA CO., Ltd.

From the Ratio of Assets, all the three companies experienced positive growth over the last 3 years, but the ratios were different. Bilibili had the lowest growth. The ROA of iQIYI grew quite a growth in 2021, almost reaching the twice of Bilibili's ROA of 2021. It was quite different from the situation of the other two companies in 2021—both the Bilibili and Mango, their ROA decreased significantly in 2021.

But the Current Ratio and Cash Ratio show a problem that iQIYI was facing a hard time. Its Current Ratio was lower than Mango's, and much lower than Bilibili's. Its repayment of liability might have been difficult and affected the work. And its Cash Ratio also faces a huge decrease in 2021, 13.68% is too low, the situation of the payment of bills was under great pressures.

On the other hand, the ROA of Bilibili and Mango went a little bit low over the years, but the ratio was still stable and small even till the last year. And their Current Ratio and Cash Ratio maintained in a healthy high-order position. Such a change can be considered as the effect of pandemic leading a decrease to the customers' willingness to pay, but the data from Bilibili and Mango showed that the main body of their structures and services are not deeply hurt.

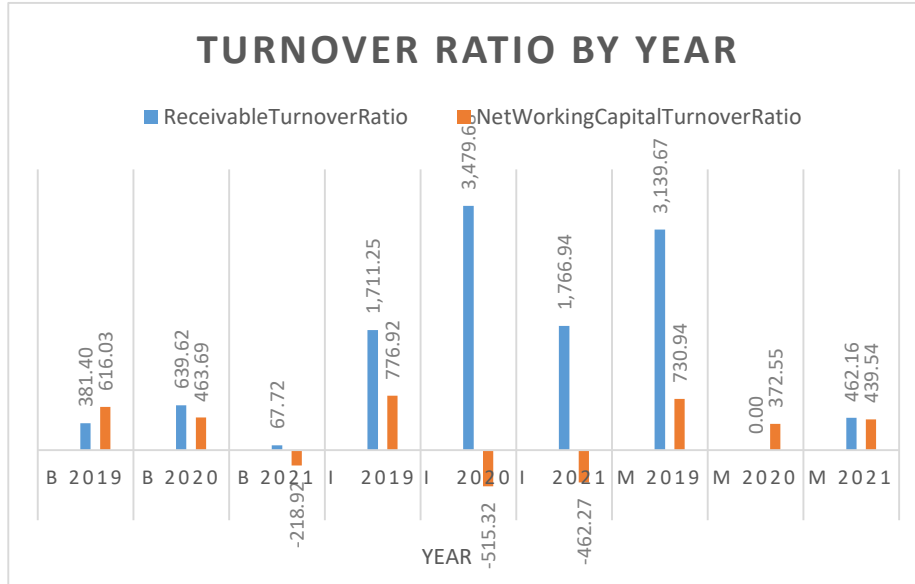


Figure 2 Financial ratio of Turnover Ratios by year for iQIYI, Inc. (1)

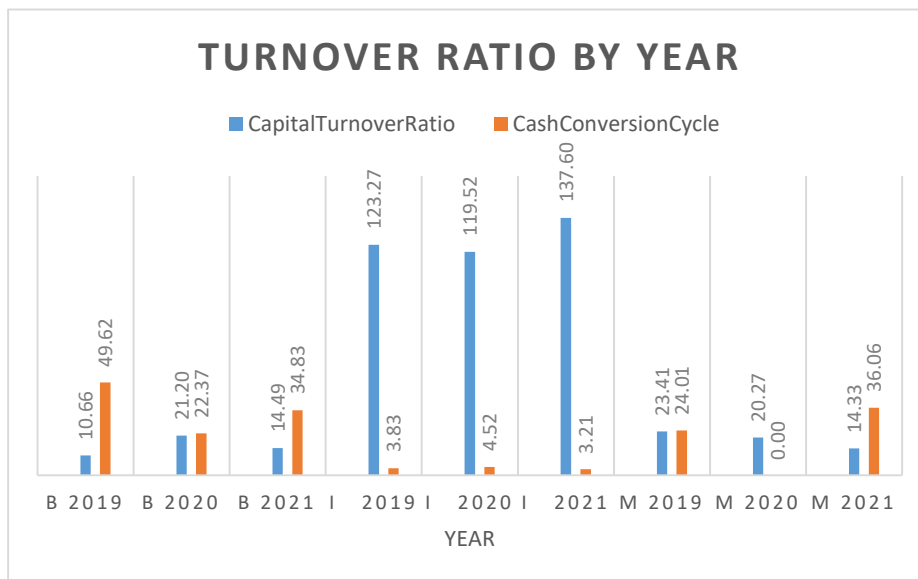


Figure 3 Financial ratio of Turnover Ratios by year for iQIYI, Inc. (2)

For this part, the data of iQIYI came to extremely bigger numbers in the four ratios. In the past three years, it has received a huge amount of capital. Its Receivable Turnover Ratio in 2019 and 2020 was 5 times of the ratio of Bilibili. Only the Receivable Turnover Ratio of Mango in 2019 can reach the iQIYI's highest position in 2020, but considering that MANGO just finished its major asset restructuring in 2018, so such an extreme Receivable Turnover Ratio in 2019 was not so unusual. And in 2020, there was no data of Receivable Turnover Ratio and Cash Conversion Cycle of Mango, but each ratio in 2021 turn to a normal level, so we think its resources utilize was quite efficiency in total.



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The data of Bilibili was generally fine, but the problem was the Receivable Turnover Ratio in 2021 was too low, and the Net Working Capital Turnover Ratio became negative. This might be caused by the growth path being too little and getting weakened. As an online streaming service company, its basic service will highly rely on foreign animations and TV drama, but the problem of immorality of a signed idol actor leads a high pressure examine and verify situations for all the film and television works. Witch not just hurt the basic online streaming service, but also troubled another main income growth point, advertisements. Unlike YouTube or some others, there were no advertisements that must be watched before or during any videos in Bilibili for so many years. So, it is looking for a new way to develop its advertising service. But because of the problem of immorality, many contracts were canceled.

5. Discussion

The main objective of the study is two-fold, as previously mentioned, that is, the study of the financial statements of the three companies before and after the epidemic, and the evaluation of the data to determine which of the three companies has given the most benefit to their audiences.

The Covid-19 has had the same impact on the three companies. Because of the closure, most of the three companies have chosen a combination of offline office and remote office, which has a certain impact on our company's work efficiency. From the perspective of return on investment, because Bilibili has not invested too much in the field of TV dramas that require offline production, it has lost less than 10% in each of the two years, and both years were -9%. The return on investment of Mango, whose main investment is the purchase of film and television rights, is -9% and -17%. However, iQIYI, whose investment direction is mainly to make movies and TV series, suffered serious losses. The return on investment of iQIYI was -199% and -155% respectively. It can be seen that during the Covid-19 period, iQIYI's TV series and movies Investment losses are serious. At the same time, because most of its operations are offline, in terms of operating losses, its losses are 4-6 times that of Bilibili, and 17 times that of Mango TV.

From the income statement, it can be seen that in the marketing of users, iQIYI spends up to 90%, 93% and 104% of net income, Bilibili accounts for 29% and 17% of net income, and Mango spends 90%, 93% and 104% of net income. Marketing expenses are only 16%, 15% and 17% of net income. In terms of operating losses, the company also has huge losses every year. The losses are 129%, 140% and 136% respectively, it is about 30%, and Mango TV is only 12-15%. This probably has something to do with the strategies of the three companies. Since its inception, iQIYI has focused on using large-scale advertising to attract customers. This strategy has allowed firm to quickly acquire a huge number of TV drama customers. But this strategy becomes somewhat meaningless after user saturation. The strategies of the other two companies, the marketing strategy of Bilibili includes the product strategy through the community mode operation, the cheap and simple price strategy and the vertical marketing channel strategy to occupy the competitive edge in the market. Now, Bilibili is focusing on China's youth. ACG culture has been included into more recent video clips by Bilibili, which has drawn a lot of young people (Tian, 2021). Mango attracts customers through TV series copyright. The tilt of the short video platform is trying to use marketing to snatch young users of Kuaishou and Tiktok.



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6. Conclusion

Regarding the impact of the outbreak on Bilibili, its effects are mainly on advertising and e-commerce, but this is only a short-term setback. Despite the temporary challenges, it experienced a positive trend as the monthly active users continued to increase, and the average daily usage hours reached a new high. On the other hand, iQIYI experienced a drop in membership due to the lack of content caused by the epidemic. The absence of content was due to the unavailability of theatrical films and postponed TV series and variety shows. Since 2018, its member revenue became its primary source of revenue, making the lack of content a significant blow to the company. In addition to the epidemic, the domestic economic situation during the first half of the year has also put pressure on the advertising market, resulting in a decline in the company's overall performance due to multiple factors. However, MANGO's position as 'the only profitable domestic long-form video company in China' remained unshaken. Despite the challenging market conditions, its net income maintained high growth year after year, and its business model has been proven effective and confirmed by the market. This is particularly noteworthy since other platforms in the local long-form video chain are still struggling to achieve profitability and shift from raw to refined operations. Compared to other Chinese platforms that are yet to start making profits or world-renowned streaming platforms like Netflix, MANGO's operating model is unique both domestically and internationally.

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